

## **ABSTRACT**

An archery bow comprising a riser extending between opposing first and second ends, with a limb coupled to each end. Each limb has a first end for connecting to the riser and a second distal end. An axle pivotally connects at least one of the limbs to one end of the riser. An actuator operatively couples between at least one of the limbs and the riser adjacent the axle for supporting the limbs about the riser. The actuator includes a resilient member for storing energy as the bow is drawn, and releasing energy as the bow is released. The resilient member pivotally attaches to the riser and the limb, elongating or compressing to dynamically change the angle between the riser and the limb while the bow is in use. After the shot, the resilient member acts as a shock absorber to damp the vibration of the bow.